

All District Engineers, Walter S. Kos & Miguel d'Escoto

Michael L. Hine

Special Provision for Polymer Modified Emulsified Asphalt

July 26, 2002

This special provision was developed by the Bureau of Materials and Physical Research (BMPR). It describes a polymer modified, slow setting, asphalt emulsion for use as either a light fog / tack coat between lifts of bituminous concrete or as a prime coat on brick, concrete or bituminous bases.

It should be inserted into all Extended Life Bituminous Concrete Pavement (Full-Depth) Superpave contracts or into other projects as recommended by the BMPR.

This special provision only adds the material to the Standard Specifications; therefore, if its use is required the designer must state so in the contract.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the November 8, 2002 and subsequent lettings. The Project Development and Implementation Section will include the paper copy in the contract.

This special provision will be available on the transfer directory July 26, 2002.

80073m

POLYMER MODIFIED EMULSIFIED ASPHALT (BDE)

Effective: November 1, 2002

Add the following to Article 1009.07 of the Standard Specifications: (insert it before the table on page 853 which begins, "The different grades are, in general, used for the following:")

- "(f) Polymer Modified Emulsified Asphalt. Polymer modified emulsified asphalts shall be either anionic (SS-1hP) or cationic (CSS-1hP). They shall meet the SS-1h requirements of Article 1009.07(a) or the CSS-1h requirements of Article 1009.07(b) respectively, with the following exceptions for both types:
- (1) The emulsified asphalt shall be modified with a styrene-butadiene diblock or triblock copolymer, or a styrene butadiene rubber.
 - (2) The cement mixing and ductility tests will be waived.
 - (3) Upon examination of the storage stability test cylinder after standing undisturbed for 24 hours, the surface shall show no white, milky colored substance and shall be a homogeneous brown color throughout.
 - (4) The distillation for polymer modified emulsion shall be performed according to AASHTO T 59 except the temperature shall be $190 \pm 5^{\circ}\text{C}$ ($374 \pm 9^{\circ}\text{F}$) and measured using an ASTM 16C (16F) thermometer.
 - (5) The residue from distillation shall have a minimum elastic recovery value of 30 percent when tested according to AASHTO T 301. The specified temperature shall be $4.0 \pm 0.5^{\circ}\text{C}$ ($39.2 \pm 1.0^{\circ}\text{F}$)."

Add the following grades "for tack or fog seal" to the table at the end of Article 1009.07 of the Standard Specifications which begins, "The different grades are, in general, used for the following:"

"SS-1hP, CSS-1hP"